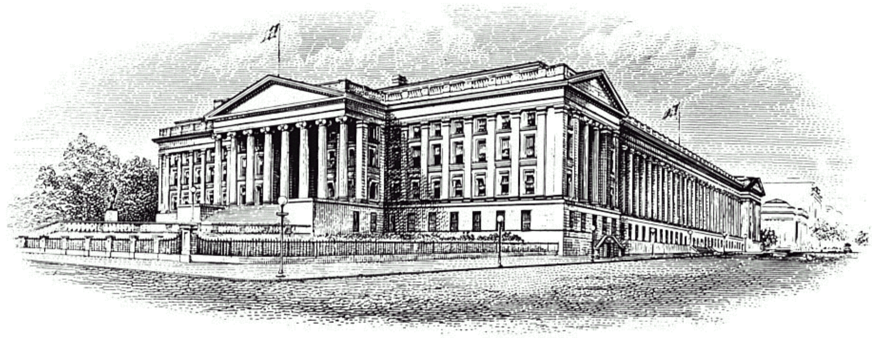


DEPARTMENT OF THE TREASURY

OFFICE OF PUBLIC AFFAIRS

For Immediate Release **Contact: Betsy Holahan**
October 17, 2002 **202-622-2960**

Remarks of
Treasury Assistant Secretary for Financial Markets Brian Roseboro
to the Business Management Roundtable
Global Fixed Income Institute

"Managing Debt Is Managing Variance"

Thank you for the opportunity to address such a distinguished gathering.

As Assistant Secretary for Financial Markets at the U.S. Treasury, I am responsible for advising Secretary O'Neill on the federal government's debt management policies. Today I'd like to share with you a principle the Secretary has ingrained at the Treasury, a principle that echoes what I'd earlier learned as a central banker, sales person, trader, and more recently a risk manager.

And that is, <u>variance matters – it matters a lot</u>. Variance is a greatly under-appreciated measure. Thinking about it always reminds me of the man who puts his feet in the oven and his head in the freezer and says, "On average, I feel just fine." The most common conceptual error I see from watchers of the U.S. Treasury, whether on Capitol Hill or Wall Street, is to over-rely on point forecasts, and to under-invest in understanding the likely scope of deviation. Eager to get the inside story on our future borrowing needs, a trader or a reporter may sidle up to me to ask, "Which are you using – or worse yet, which do you believe – the Administration or 'Street' projections?" Wrong question. It presumes we Treasury gnomes paste a single number above our computers and walk around with it pasted to our foreheads.

When we plan for future debt management decisions, we can no more zero in on – nor solely plan around – one estimate than, for example, a currency trader can presume that the forward rate is a sure predictor of the future spot price. We have to look at a range of futures and test how our decisions would turn out in each.

In the time you've graciously afforded me, I'll start by reviewing the Treasury's debt management mission, and then speak to the role of variance in shaping how we achieve that mission. I'll then close with a look at what variance analysis says about our future borrowing needs. Here's a sneak preview for those who like to jump to the end of the book: there's far more capacity in the U.S. Treasury market than our bleakest fiscal projections suggest we will need.

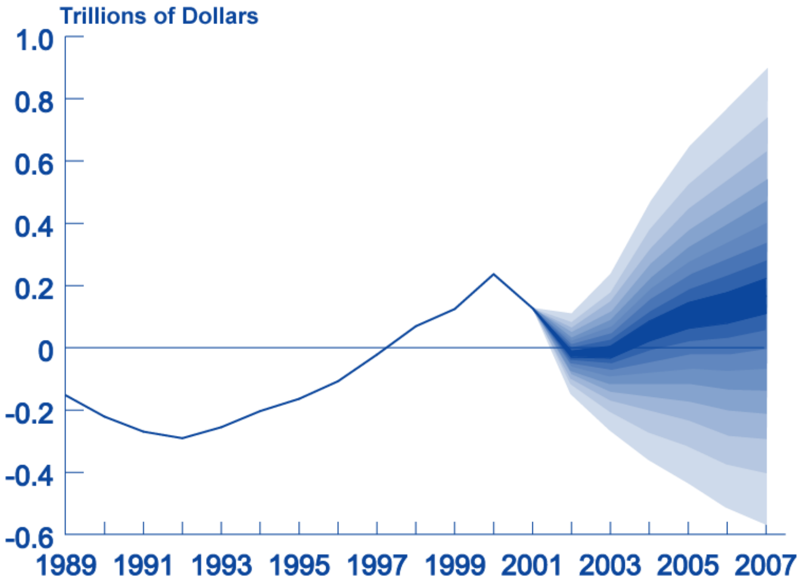
An apparent contradiction

The key to education is repetition. So let me start by re-stating the Treasury's single objective in managing the marketable debt. Just like that of a private sector chief financial officer, our objective is ***to achieve the lowest cost, over time, for the federal government's financing needs.*** However, unlike a private sector CFO, a Treasury debt manager does not, and must not, "time the market." We never have. Recent ten-year yields are low by historical standards – 40 year lows – but we aren't holding snap auctions. We don't even take the yield curve into account when we allocate how much to raise by different maturities. Nor do we cancel auctions due to spikes in our cash balances. Instead, to achieve our objective of lowest cost over time, the Treasury commits to ***regular*** and ***predictable*** issuance across a wide range of securities. This regularity and predictability gives investors certainty that they can get our securities if they need them. We're always there.

Market participants thus have grown habituated to using Treasuries for pricing, hedging, and cash management, and to relying on our stable issuance patterns. In 2001, even with reduced issuance over the prior years, the daily average volume of transactions in the Treasury market averaged almost $300 billion. That's over three times the daily average volumes for each of corporate debt, agency debt, mortgage-related securities, and even the New York Stock Exchange. In 2002, we're averaging close to $350 billion. Only the volume of interest rate swaps transactions are comparable with Treasury securities. Over time, we believe this regularity and predictability cuts our financing costs more than market-timing moves ever could.

So ideally, one could conclude we should lock down our issuance calendar through eternity and post it on our website. We can't. We just don't have crystal-clear foresight of how much money we'll need to borrow.

In fact, fiscal forecasts are notoriously unreliable – not because of the ability or efforts of those charged with making the forecasts, but because of the quality and variability of the multiple inputs. Going back to the early 1990s, the average forecast uncertainty, with only an 8-month horizon, is $75 billion. Or take the "post-equity bubble" surprise we faced last year. The gap between the February 2001 forecast for FY 2002 and the current projected results, for FY 2002, is no less than $396 billion. And as the forecasting horizon extends, the forecast uncertainties magnify. Take a look at the Congressional Budget Office's self-estimated variance over the next five years:



Source: CBO Outlook (1/02)

Is it just a case of bad "government" forecasting? No, the private sector banks and economists get it just as wrong. A small part of the problem may be that the U.S. Treasury has less control over fiscal policy than do our sister finance ministries in parliamentary systems. But the underlying problem is that our financing needs, and thus auction sizes, are constantly shifting in response to at least four dynamic factors:

(1) Seasonal changes in our cash flows (up to $200 billion), daily standard deviation of $18 billion!
(2) Structural changes in tax and expenditure policies
(3) U.S. economic activity
(4) The relationship between the economy, tax code, and taxes actually raised

Yet just a moment ago I said that our mantra was "regular and predictable." Do I contradict myself?

Managing variance

I don't think so. "Regular and predictable" does not mean static, inflexible and never changing. It means factoring variance into our debt management policies. It means reducing the uncertainty where we *can* and planning for where we *cannot*. It means offering a flexible product range, improving our auction and distribution systems, and preparing the market as much as possible when we do have to make policy changes.

The Office of Management and Budget, the Council of Economic Advisors, the Treasury, and other government offices strive to improve our economic forecasting and thus our borrowing projections. But think for a moment on the difficulty faced if you were running your business off metrics, in our case economic indicators, that are in many instances as much as 6 months old. This alone creates a significant impediment to improvements in forecasting. Another major impediment – politics– well, that forecasting we will leave to the tarot-card readers.

But better forecasting is only part of the answer. "In preparing for battle," General (later President) Eisenhower advised**,** "I have always found that plans are useless, but planning is indispensable." So we constantly ask those fundamental risk management questions: "What is? What was? What if? And how?" What is our current, up-to-date, borrowing requirement? What happened after we adapted to changes in previous borrowing requirements? What if we vary the assumptions driving future borrowing needs? How can we better prepare the market for alterations of our borrowing pattern when – *not if* – the future does not fit our forecast?

So back to our friendly reporter's question: do we use OMB or Street projections?

OMB projections are the point of reference, the central tendency – but no single point forecast dominates our thinking. We plan for a broad distribution. Given the uncertainties in all forecasts, it's the only prudent thing to do.

Further, our flexibility is increased by offering as broad a product range as we can, consistent with minimizing cost to the taxpayer over time. Our current calendar has roughly 180 auctions per year: weekly for 4-week, 13-week, and 26-week bills, monthly for 2-year notes, quarterly for longer-dated nominal notes, and three times a year for inflation-indexed securities.

The broader customer demand is for our products, the more diversified we can be and the more easily we can respond to future events. That's partly why we are now promoting the 10-year inflation-indexed note. These notes are particularly interesting for investors, because their market value varies inversely with real U.S. interest rates, not nominal rates. For us as issuers, indexed notes diversify our portfolio of liabilities. They are a unique asset class – dollar-denominated, inflation-protected, and backed by the U.S. full faith and credit. Adding these securities to a portfolio increases diversification but does not increase credit risk, thus potentially improving the risk/reward tradeoff. Further, these securities can mitigate exchange rate risk, since they are linked to a measure of purchasing power. We think they should be attractive to every diversified investor.

Still, occasionally the changes in our borrowing needs exceed the flexibility built into even this diverse auction schedule. That's when we have to consider policy changes. Over the last three decades, Treasury has introduced and withdrawn numerous securities including the 52 week bill, 3 year note, 4 year note, 5 year inflation index note, seven year note, twenty year bond, thirty year bond, thirty year callable bond, thirty year inflation indexed bond, and foreign-denominated securities. We always signal our deliberations well ahead of time, both in our discussions with the Treasury Borrowing Advisory Committee (with minutes publicized immediately) and in our quarterly refunding statements. When we make a decision, we announce it at a quarterly refunding as early as we can. Market participants gain substantial lead-time for any specific changes to our offerings, and an awareness of the problems or choices we face.

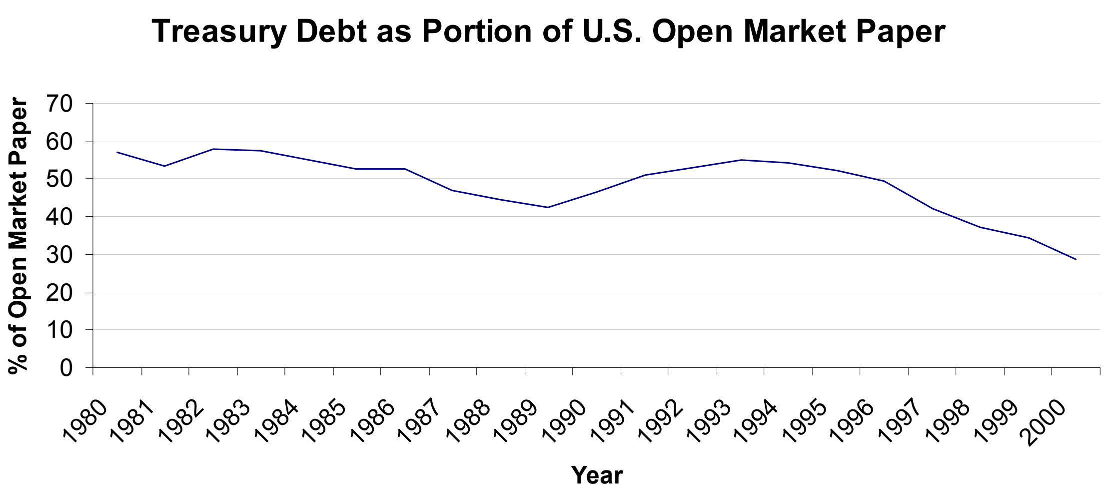
We also believe that it is especially important to plan for the variance risk that exists for the distribution of our securities and continue to grow our base of direct competitive bidders in order to sell our securities at the lowest possible price. In the U.S., approximately 1,200 small to medium-sized submitters directly participate in Treasury's auctions using our IP browser-based bidding mechanism implemented in 1998.

Market capacity and crowding-out

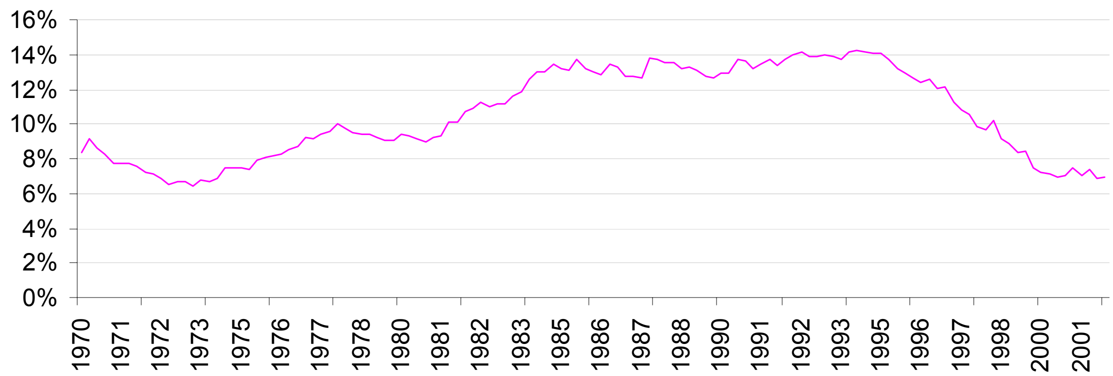
So let me now turn to my final point, which is to address a question apparently on many of your minds. How much will the U.S. borrow in the next couple years, will we "crowd out" the market, and if so, what do we plan to do about it? OMB's estimate of additional marketable borrowing for FY 2002 was $209 billion. Its forecast for FY 2003 was $126 billion. But first, let's put our current debt in perspective.

Due to economic growth and the surpluses of the late 1990s, publicly held debt today is about 35 percent of GDP, versus 50 percent a decade ago. And while Treasury debt has slowly shrunk, the overall dollar bond markets have doubled from $8 trillion in 1990 to almost $20 trillion today.

So even after running a roughly $165 billion deficit in fiscal 2002, our bill issuance as a percentage of all "open market paper" – short-term commercial paper plus Treasury bills – stands at nearly an all-time low of 29 percent. The story is the same for our notes and bonds. They're at a 28-year low as a portion of long-term equity and debt.



Treasury Notes & Bonds as Portion of U.S. Long-Term Nonfinancial Credit and Equity Market Assets



Source: Federal Reserve Flow of Funds

Now let's put on our risk management hats, and take the darkest, ugliest, most pessimistic projections we can outlandishly imagine, and then make them even worse, to say $400 billion per year. The budget deficit would still be below four percent of GDP, versus five percent or more several times in the past two decades – and now in a much deeper fixed income market. On every measure, we would still remain far below any theoretical market limit for Treasury debt, and far away from crowding out other issuers.

Obviously we're not eager for this kind of borrowing, nor do we expect anything coming close to it. The President has called repeatedly on Congress to curb spending, and we all look forward to a robust economic recovery. But my point is that, even taking inevitable variance into account, we are confident that the financial markets can digest any increases in Treasury issuance that prove necessary, whether through current or if necessary new securities.

I again thank you for the opportunity to speak at this conference. I would be more than happy to answer any questions you may have.